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Product: 84142

Mil-Spec Coax, 50 Ohm, RG-142, 19 AWG Solid SCCS, Double 95% SC Braid, FEP Jkt, CMP, Commercial Non-QPL

Product Description

Mil-Spec Coax, 50 Ohm, RG-142, 19 AWG Solid Silvered Copper Covered Steel Conductor, PTFE Insulation, Double 95% Silvered Copper Braid Shield, FEP Jacket, CMP, Commercial, non-QPL

Technical Specifications

Product Overview

Suitable Applications:	Aerospace wireless communication

Construction Details

RG Type:	142

Conductor

AWG	Stranding	Nom. Diameter	Material
19	Solid	0.037 in	SCCS - Silvered Copper Covered Steel

Insulation

Material	Nom. Diameter
PTFE - Polytetrafluoroethylene	0.116 in

Outer Shield Material

Layer	Outer Shield Type	Material	Coverage
1	Braid	Silvered Copper (SC)	95%
2	Braid	Silvered Copper (SC)	95%

Outer Jacket Material

Material	Nom. Diameter
FEP - Fluorinated Ethylene Propylene	0.195 in

Electrical Characteristics

VSWR

Frequency [MHz]	Max. VSWR
1 MHz - 12.4 GHz	per M17/60-RG142

Attenuation

Frequency	Nom. Attenuation [dB/100ft]
1 MHz	0.3 dB/100ft
10 MHz	1.1 dB/100ft
50 MHz	2.7 dB/100ft
100 MHz	3.9 dB/100ft
200 MHz	5.6 dB/100ft
400 MHz	6.9 dB/100ft
700 MHz	11.0 dB/100ft
900 MHz	12.5 dB/100ft
1000 MHz	13.5 dB/100ft

2000 MHz	19.3 dB/100ft
3000 MHz	24.3 dB/100ft
5000 MHz	32.6 dB/100ft
8000 MHz	43.2 dB/100ft

Power Rating

Frequency [MHz]	Max. Power Rating [W]
50 MHz	3,500 W
100 MHz	2,400 W
400 MHz	1,100 W
1,000 MHz	650 W
3,000 MHz	330 W
8,000 MHz	180 W

Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Impedence
19.0 Ohm/1000ft	2.3 Ohm/1000ft	29 pF/ft	50 Ohm

Voltage

UL Voltage Rating	Non-UL Voltage Rating
300 V (CMP)	1400 V (Mil-Spec)

Mechanical Characteristics

Temperature

UL Rating	Operating
200°C	-70°C to +200°C

Bend Radius

Installation Min.
2 in

Bulk Cable Weight:	42 lbs/1000ft
Max. Pull Tension:	104 lbs

Standards and Compliance

Environmental Suitability:	Indoor - Plenum, Indoor, Outdoor, Sunlight Resistance
Sustainability:	CA Prop 65
Flammability / Fire Resistance:	NFPA 262
NEC / UL Compliance:	CMP
CEC / C(UL) Compliance:	CMP
Military Compliance:	Commercial, non-QPL product (M17/60-RG142)
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU, EU Directive 2011/65/EU (ROHS II), EU Directive 2012/19/EU (WEEE)
APAC Compliance:	China RoHS II (GB/T 26572-2011)

History

Update and Revision:	Revision Number: 0.315 Revision Date: 08-25-2020

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